

KENAI AK	
Latitude = 60.57 N	WMO No. 702590
Longitude = 151.20 W	Elevation = 95 feet
Period of Record = 1973 to 1996	Average Pressure = 29.64 inches Hg

Design Criteria Data

	Design Value	Mean Coincident (Average) Values			
		Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Dry Bulb Temperature (T)	(°F)				
Median of Extreme Highs	75	59	50	8.9	N
0.4% Occurrence	68	56	49	9.2	W
1.0% Occurrence	65	55	50	9.2	WSW
2.0% Occurrence	63	54	50	9.2	SW
Mean Daily Range	15	-	-	-	-
97.5% Occurrence	-9	-9	3	2.7	NNE
99.0% Occurrence	-17	-17	2	2.6	NNE
99.6% Occurrence	-23	-23	1	2.8	NNE
Median of Extreme Lows	-28	-28	1	3.1	NNE
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Wet Bulb Temperature (T_{wb})	(°F)				
Median of Extreme Highs	62	70	68	9.0	W
0.4% Occurrence	58	64	60	8.5	SW
1.0% Occurrence	57	62	59	8.8	SW
2.0% Occurrence	56	61	58	8.8	SW
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Humidity Ratio (HR)	(gr/lb)				
Median of Extreme Highs	75	66	0.50	9.1	NNE
0.4% Occurrence	65	59	0.44	8.2	SW
1.0% Occurrence	62	58	0.42	8.3	SW
2.0% Occurrence	60	57	0.41	8.5	SW
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		0	0	0	0

Other Site Data

Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
3	1.0	110	0.0 + 0.0
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
37.5	N/A	N/A	83

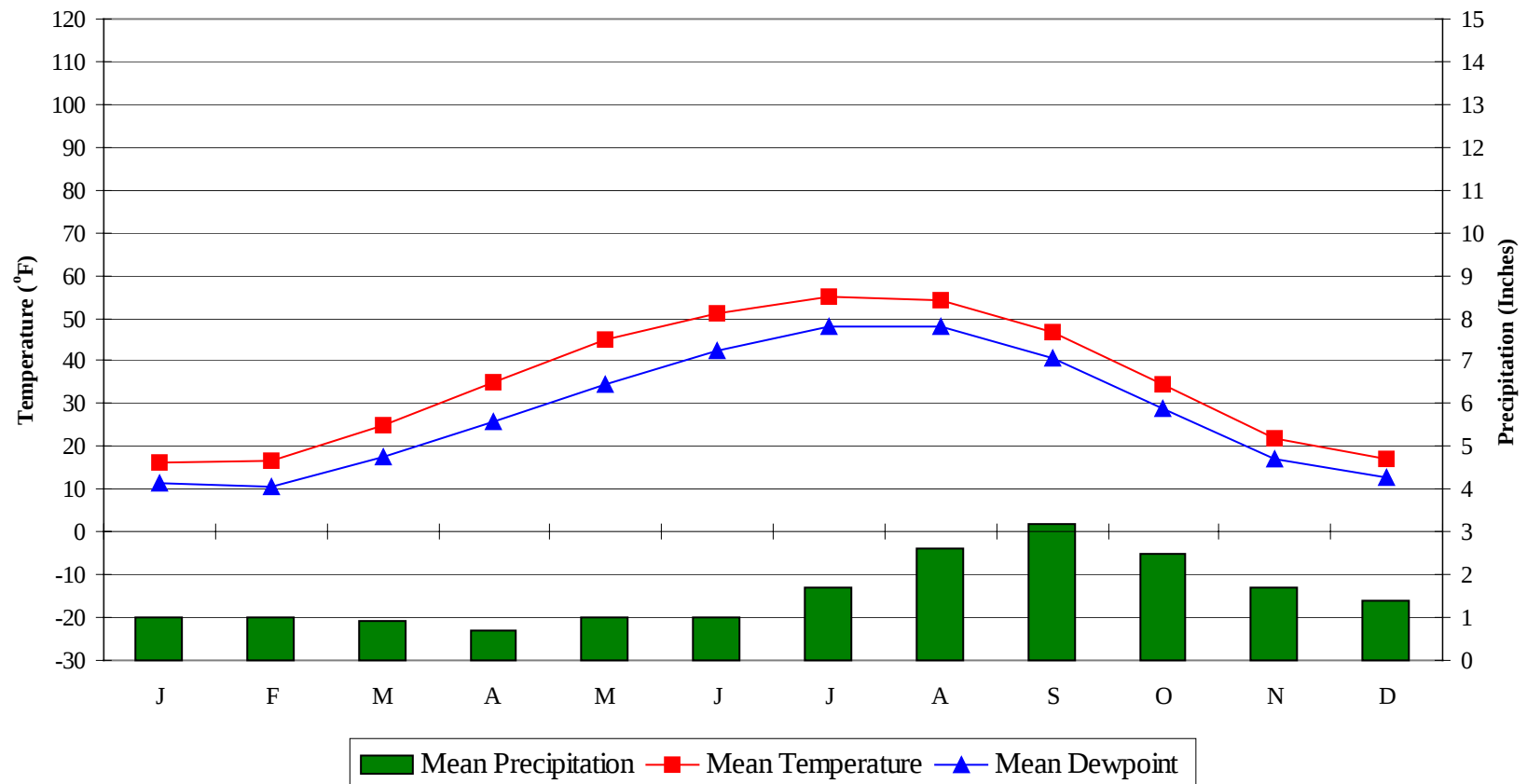
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

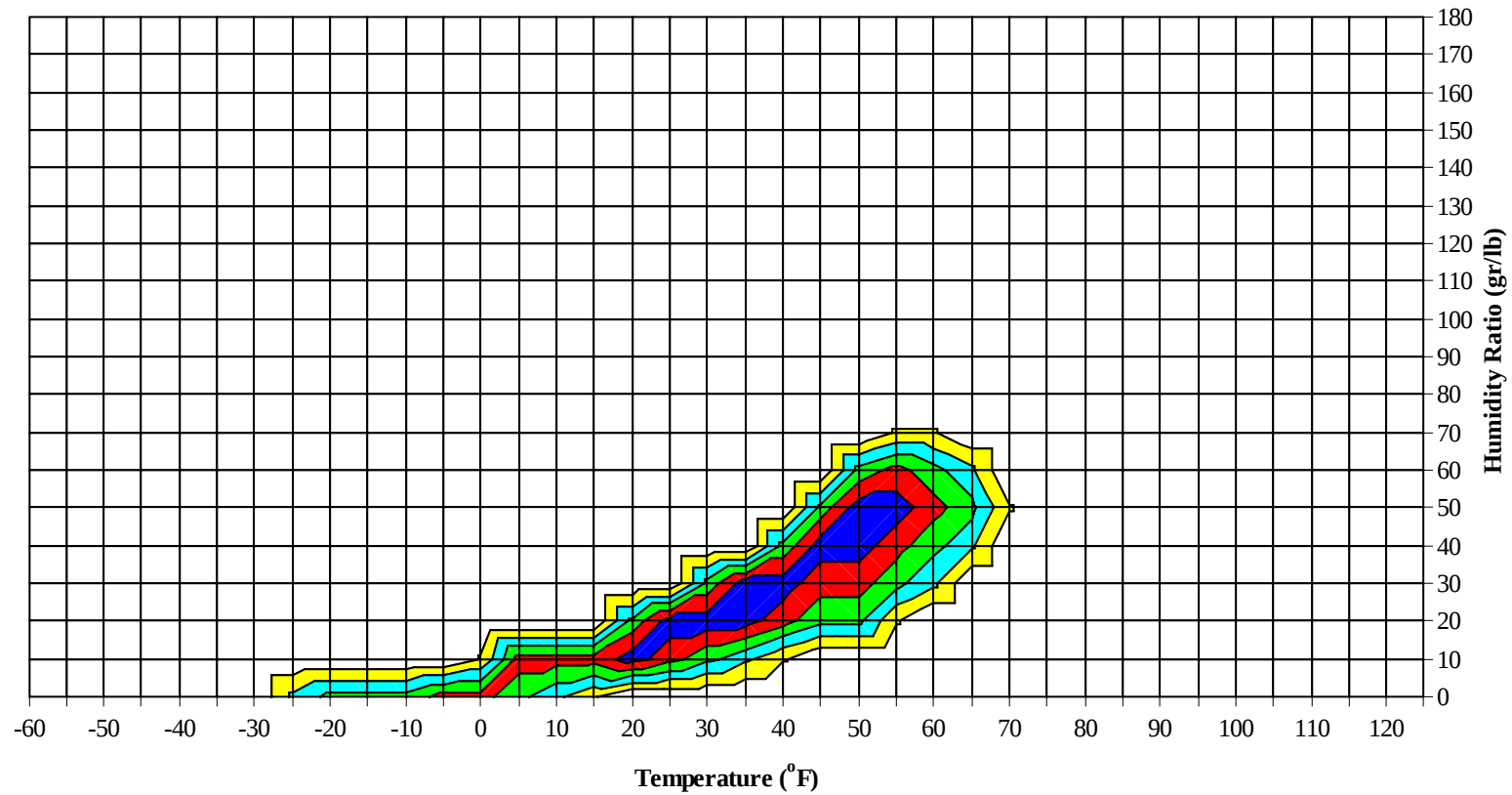


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Long Term Psychrometric Summary



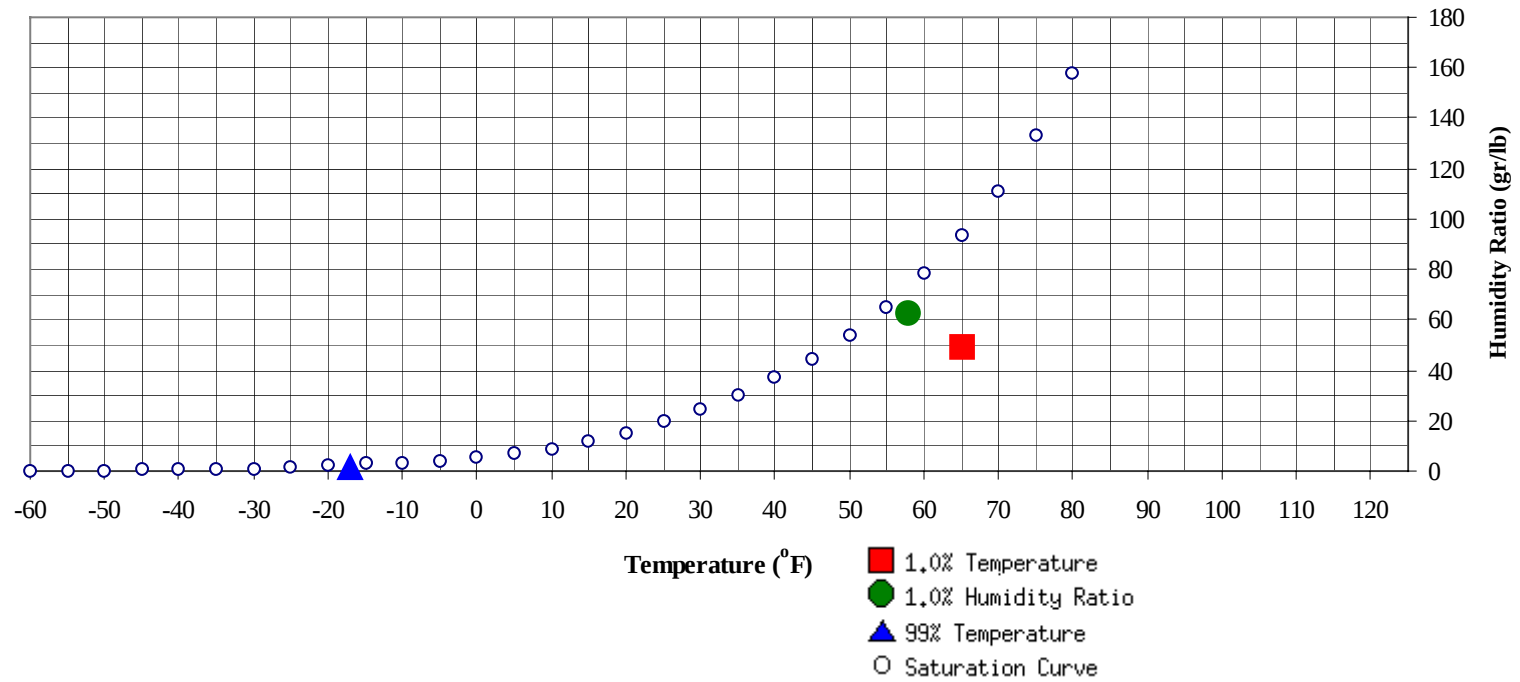
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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Psychrometric Summary of Peak Design Values



99% Dry Bulb	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)	1.0% Humidity Ratio	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
	-17	1.5	-3.9		62.3	57.9	55.7	54	23.6

1.0% Dry Bulb	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
	65	49.4	55.1	23.3

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Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	January					February					March				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
85 / 89															
80 / 84															
75 / 79															
70 / 74															
65 / 69															
60 / 64															
55 / 59															
50 / 54															
45 / 49							0		0	40.0		4	1	5	38.0
40 / 44	1	1	1	3	36.7	1	5	2	8	36.0	1	20	10	31	35.6
35 / 39	15	17	17	49	33.6	11	20	18	49	33.5	19	53	42	114	33.0
30 / 34	44	49	46	139	30.1	32	36	37	105	30.2	56	61	64	181	29.5
25 / 29	43	40	41	124	25.7	31	31	30	92	25.3	44	42	45	131	25.1
20 / 24	29	30	27	86	21.1	26	27	27	80	20.5	33	27	31	91	20.5
15 / 19	21	19	19	59	16.1	21	29	25	75	15.6	24	19	21	64	15.8
10 / 14	16	20	20	56	11.0	18	24	21	63	10.7	20	10	13	43	11.0
5 / 9	14	17	15	46	6.2	19	18	20	57	6.1	14	5	9	28	6.3
0 / 4	14	15	14	43	1.5	16	12	15	43	1.3	13	3	5	21	1.5
-5 / -1	9	9	10	28	-2.8	11	6	9	26	-2.9	8	2	3	13	-2.9
-10 / -6	12	10	11	33	-7.1	11	5	10	26	-7.0	8	1	2	11	-6.9
-15 / -11	7	7	9	23	-12.0	11	4	7	22	-11.9	4	1	1	6	-11.8
-20 / -16	7	5	7	19	-16.8	8	2	3	13	-16.7	2	0	1	3	-16.9
-25 / -21	7	4	6	17	-21.8	5	1	1	7	-21.6	1	0	0	1	-21.3
-30 / -26	4	2	3	9	-26.5	2	1	0	3	-26.7	1	0		1	-26.4
-35 / -31	2	1	2	5	-31.4	1	0	0	1	-31.1					
-40 / -36	1	1	1	3	-36.1										
-45 / -41	0	0	0	0											
-50 / -46			0	0											

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

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Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	April					May					June				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
85 / 89															
80 / 84															
75 / 79							0	0	0	55.7		0	0	0	56.7
70 / 74							1	1	2	52.5		2	1	3	55.5
65 / 69							3	1	4	51.7	0	10	5	15	53.7
60 / 64		0		0	46.0	0	9	5	14	49.3	1	32	15	48	51.7
55 / 59		2	1	3	45.1	1	30	15	46	46.6	6	72	39	117	49.7
50 / 54	0	14	6	20	42.1	7	69	41	117	44.2	54	87	93	235	47.6
45 / 49	0	38	20	58	39.7	33	88	75	196	42.1	106	34	74	214	44.9
40 / 44	10	68	51	129	36.7	89	39	76	204	39.2	57	2	13	72	41.3
35 / 39	59	62	72	194	33.7	71	8	28	107	35.3	13	0	0	13	36.4
30 / 34	83	34	57	173	30.0	38	1	6	45	31.2	2			2	32.1
25 / 29	46	11	20	77	25.5	9		0	9	26.9	0			0	28.3
20 / 24	21	7	9	37	20.6	0			0	22.0					
15 / 19	11	3	3	17	15.8										
10 / 14	5	1	1	7	10.9										
5 / 9	3	0	1	4	6.2										
0 / 4	1	0	0	1	1.5										
-5 / -1	0		0	0	-2.9										
-10 / -6	0		0	0	-6.8										
-15 / -11	0			0	-11.6										
-20 / -16	0			0	-16.0										
-25 / -21															
-30 / -26															
-35 / -31															
-40 / -36															
-45 / -41															
-50 / -46															

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Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	July					August					September				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
85 / 89							0		0	66.0					
80 / 84		0	0	0	61.3		0	0	0	65.0					
75 / 79		1	0	1	59.7		0	0	0	61.1					
70 / 74		6	2	8	58.5		5	2	7	58.3					
65 / 69	0	21	9	30	56.7		22	8	30	56.8		2	1	3	54.4
60 / 64	3	65	33	101	54.7	1	63	30	94	54.9	0	14	5	19	52.3
55 / 59	33	97	92	221	52.7	30	101	88	219	53.0	3	49	23	75	50.7
50 / 54	132	55	100	287	50.0	105	52	93	250	50.1	28	87	70	186	48.3
45 / 49	64	3	13	80	46.4	69	5	22	96	46.0	75	57	78	210	44.8
40 / 44	13		0	13	41.9	27	0	4	31	41.2	58	21	36	115	40.5
35 / 39	3			3	37.0	12	0	1	13	36.4	38	7	17	62	35.7
30 / 34	0			0	32.0	3		0	3	32.1	22	2	7	31	30.9
25 / 29						0			0	28.0	11	0	3	14	26.1
20 / 24						0			0	24.0	3	0	0	3	21.9
15 / 19											1			1	17.1
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															
-35 / -31															
-40 / -36															
-45 / -41															
-50 / -46															

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Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	October					November					December				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
85 / 89															
80 / 84															
75 / 79															
70 / 74															
65 / 69															
60 / 64															
55 / 59	0	1	0	1	48.4										
50 / 54	1	12	4	17	45.9		0		0	45.0					
45 / 49	14	40	25	79	42.7	0	1	0	1	40.8	0		0	0	40.2
40 / 44	36	56	46	138	39.0	5	10	6	21	38.5	3	4	2	9	37.4
35 / 39	55	57	58	170	34.7	24	32	27	83	34.4	13	15	16	44	33.7
30 / 34	55	41	55	151	30.7	47	50	46	142	30.3	37	42	40	120	30.1
25 / 29	36	21	30	87	25.8	31	38	37	106	25.5	45	43	42	130	25.9
20 / 24	22	10	15	47	21.0	30	31	32	93	21.1	31	31	36	98	21.1
15 / 19	14	5	8	27	16.2	24	30	27	81	16.2	28	31	27	86	16.3
10 / 14	8	2	4	14	11.6	20	20	21	61	11.4	20	20	21	61	11.5
5 / 9	3	1	2	6	6.3	19	12	18	49	6.4	15	15	14	44	6.3
0 / 4	3	0	1	4	1.4	15	7	11	33	1.6	14	15	14	43	1.5
-5 / -1	1	0	0	1	-2.6	9	4	8	21	-2.7	8	9	10	27	-2.8
-10 / -6	0	0	0	0	-6.3	8	3	4	15	-7.0	8	9	9	26	-7.3
-15 / -11						4	1	2	7	-11.4	8	6	9	23	-12.1
-20 / -16						1	1	1	3	-16.7	9	4	6	19	-16.8
-25 / -21						1	0	1	2	-21.4	5	2	3	10	-21.8
-30 / -26						0	0	0	0	-25.8	2	0	0	2	-26.1
-35 / -31											0			0	-30.0
-40 / -36															
-45 / -41															
-50 / -46															

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Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
85 / 89	0			0	66.0
80 / 84	0			0	63.1
75 / 79	2			1	3 59.4
70 / 74	14			6	20 57.4
65 / 69	0	58	24	82	55.8
60 / 64	5	183	87	275	53.8
55 / 59	73	352	256	681	51.6
50 / 54	329	374	406	1109	48.4
45 / 49	361	271	307	940	44.0
40 / 44	302	228	248	778	39.0
35 / 39	335	272	298	906	34.3
30 / 34	418	315	358	1092	30.2
25 / 29	296	226	248	770	25.5
20 / 24	197	163	177	537	20.9
15 / 19	145	135	129	410	16.0
10 / 14	108	97	100	306	11.1
5 / 9	86	69	77	232	6.3
0 / 4	75	53	61	189	1.5
-5 / -1	45	30	40	115	-2.8
-10 / -6	48	28	36	112	-7.1
-15 / -11	34	19	27	80	-11.9
-20 / -16	28	13	18	59	-16.8
-25 / -21	20	8	11	39	-21.7
-30 / -26	9	4	4	17	-26.5
-35 / -31	3	2	2	7	-31.3
-40 / -36	1	1	1	3	-36.1
-45 / -41	0	0	0	0	
-50 / -46			0	0	

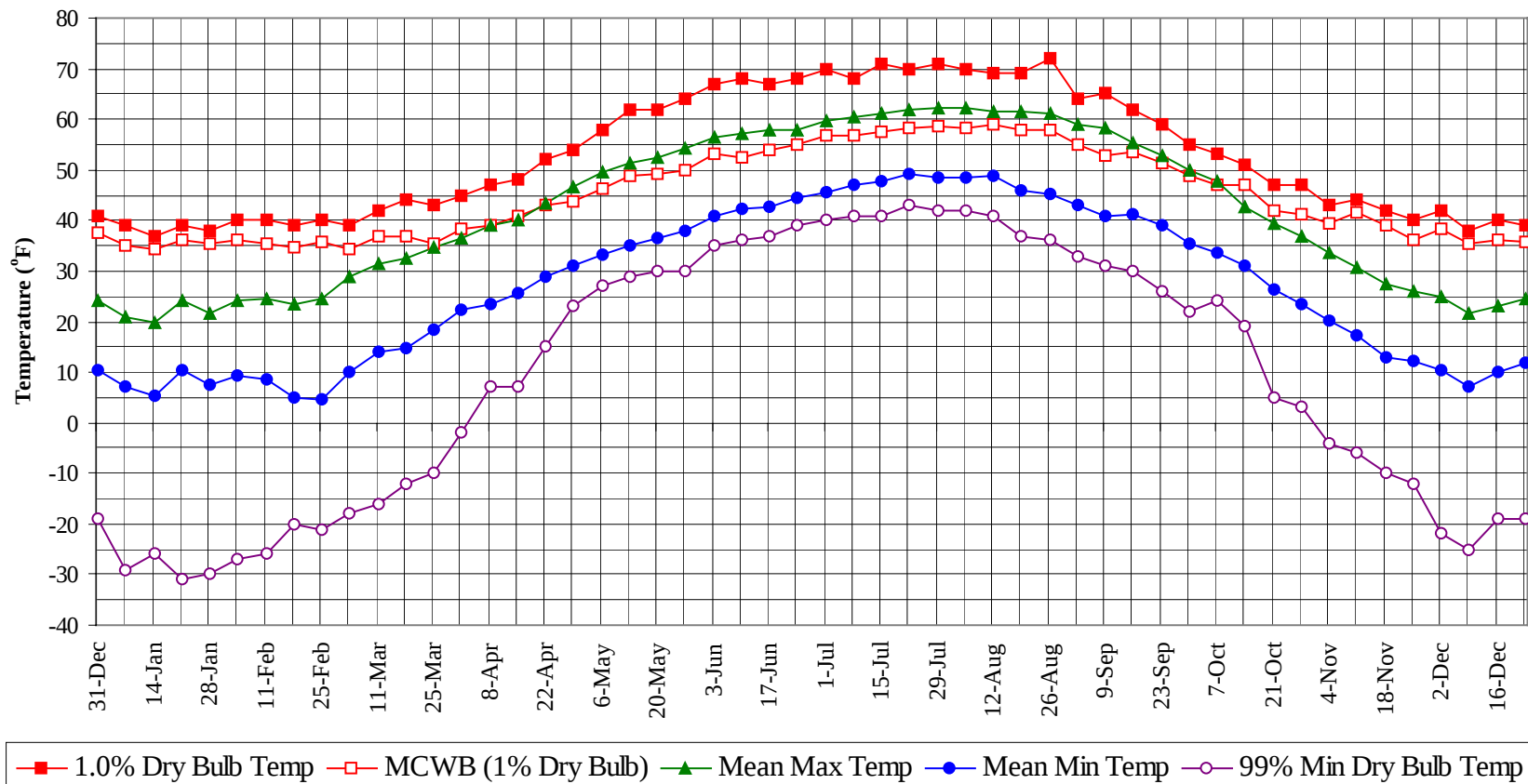
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

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Annual Summary of Temperatures

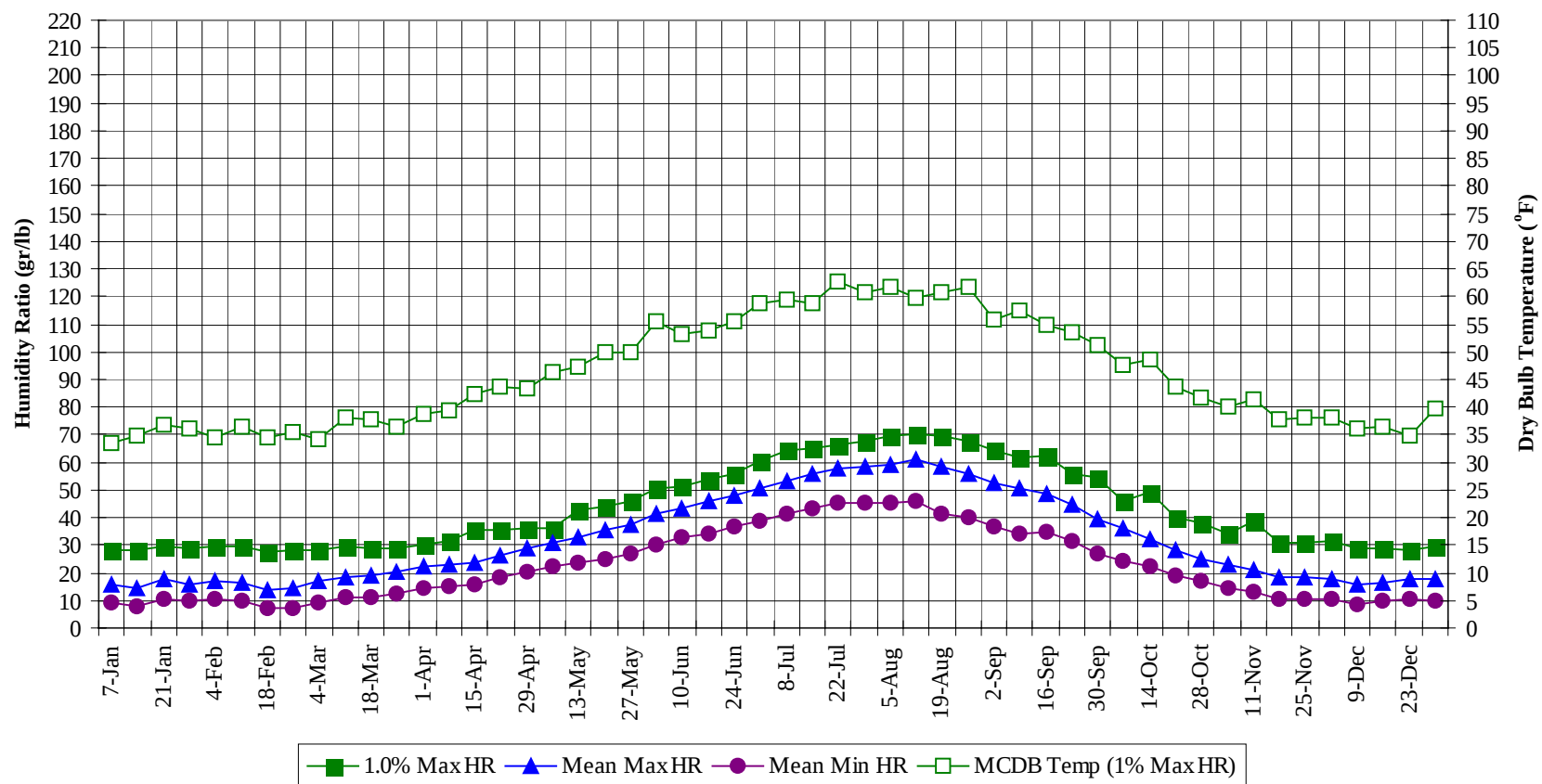


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Long Term Humidity and Dry Bulb Temperature Summary



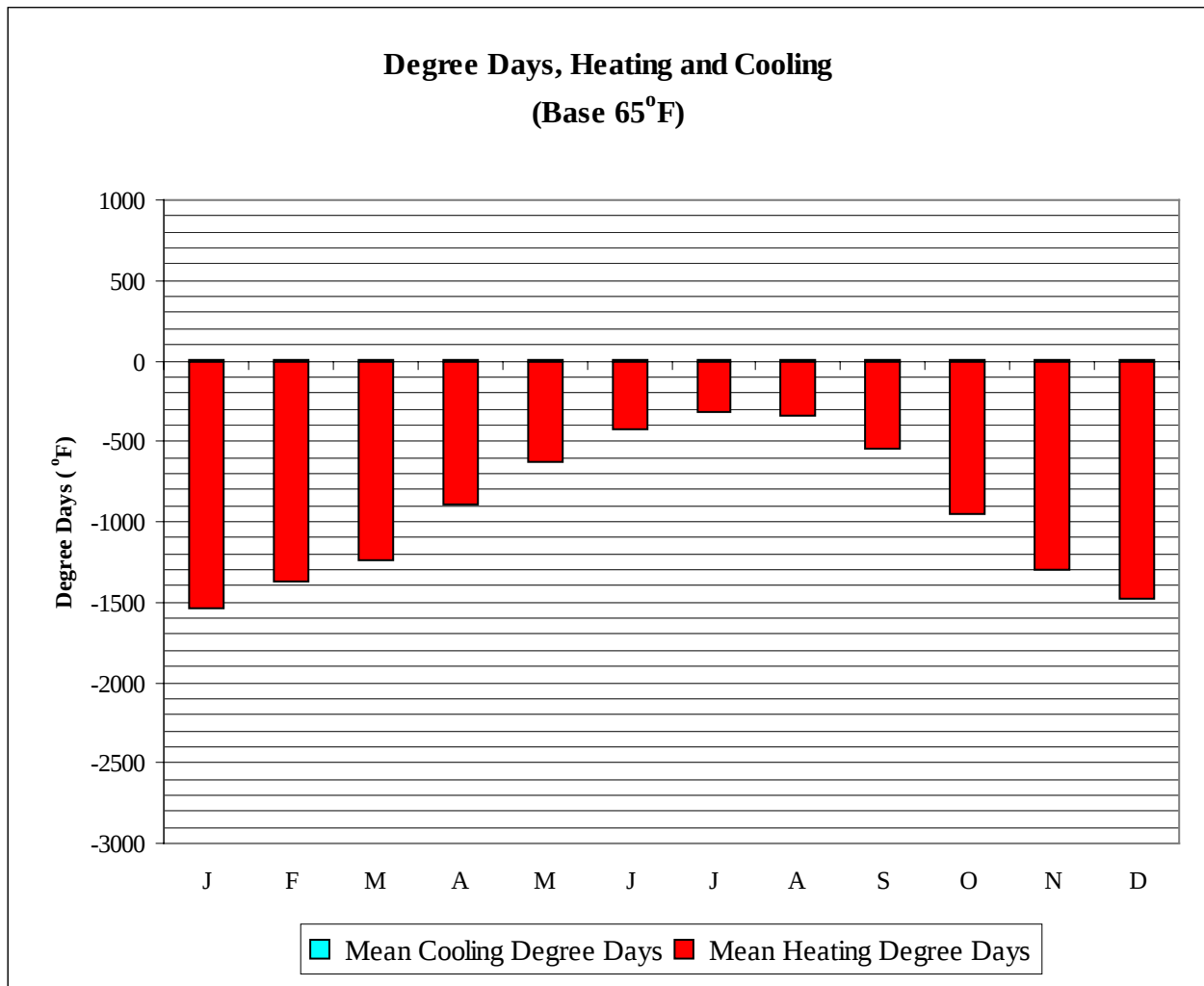
KENAI**AK****WMO No. 702590****Long Term Dry Bulb Temperature and Humidity Summary**

Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	39.0	35.0	20.8	7.2	-29.0	28.0	33.6	15.7	9.2
14-Jan	37.0	34.4	20.0	5.2	-26.0	28.0	34.9	14.4	8.2
21-Jan	39.0	36.2	24.1	10.3	-31.0	29.4	36.7	17.5	10.6
28-Jan	38.0	35.4	21.6	7.4	-30.0	28.7	36.1	15.7	9.6
4-Feb	40.0	36.0	24.2	9.4	-27.0	29.4	34.5	16.9	10.2
11-Feb	40.0	35.6	24.7	8.7	-26.0	29.4	36.5	16.5	9.9
18-Feb	39.0	34.6	23.6	4.9	-20.0	27.3	34.6	14.0	7.4
25-Feb	40.0	35.6	24.6	4.7	-21.0	28.0	35.4	14.7	7.5
4-Mar	39.0	34.4	28.9	10.1	-18.0	28.0	34.0	17.3	9.0
11-Mar	42.0	36.9	31.5	13.9	-16.0	29.4	38.2	18.5	11.0
18-Mar	44.0	36.8	32.5	14.9	-12.0	28.7	37.9	19.3	11.2
25-Mar	43.0	35.4	34.6	18.2	-10.0	28.7	36.4	20.2	12.7
1-Apr	45.0	38.2	36.5	22.4	-2.0	30.1	38.7	22.1	14.6
8-Apr	47.0	39.0	39.0	23.6	7.0	31.5	39.4	23.0	15.0
15-Apr	48.0	40.8	40.0	25.6	7.0	35.7	42.3	23.9	15.9
22-Apr	52.0	42.9	43.3	28.9	15.0	35.7	43.8	26.3	18.5
29-Apr	54.0	43.8	46.8	31.0	23.0	36.4	43.2	29.2	20.5
6-May	58.0	46.2	49.5	33.2	27.0	36.4	46.2	31.1	22.4
13-May	62.0	48.8	51.4	35.2	29.0	42.7	47.3	33.1	23.5
20-May	62.0	49.1	52.6	36.6	30.0	44.1	49.8	35.3	24.9
27-May	64.0	50.1	54.2	37.9	30.0	46.2	50.1	37.6	26.9
3-Jun	67.0	53.1	56.5	40.8	35.0	50.4	55.5	41.4	30.1
10-Jun	68.0	52.5	57.0	42.3	36.0	51.1	53.0	43.0	32.6
17-Jun	67.0	53.9	58.1	42.8	37.0	53.9	53.7	45.9	34.0
24-Jun	68.0	55.1	58.0	44.5	39.0	56.0	55.4	48.1	36.5
1-Jul	70.0	56.7	59.7	45.6	40.0	60.2	58.9	50.8	38.7
8-Jul	68.0	56.9	60.3	47.1	41.0	64.4	59.6	53.1	41.6
15-Jul	71.0	57.6	61.3	47.7	41.0	65.1	58.8	55.7	43.5
22-Jul	70.0	58.1	61.9	49.0	43.0	66.5	62.8	58.0	45.5
29-Jul	71.0	58.6	62.1	48.6	42.0	67.9	60.7	58.7	45.3
5-Aug	70.0	58.2	62.3	48.5	42.0	69.3	61.6	59.1	45.4
12-Aug	69.0	59.1	61.5	48.7	41.0	70.0	59.9	60.8	45.8
19-Aug	69.0	57.8	61.6	46.1	37.0	69.3	60.8	58.2	41.7
26-Aug	72.0	58.0	61.2	45.1	36.0	67.9	61.6	55.9	40.0
2-Sep	64.0	54.9	58.8	43.0	33.0	64.4	56.0	52.4	37.0
9-Sep	65.0	52.9	58.1	40.7	31.0	61.6	57.6	50.5	34.0
16-Sep	62.0	53.4	55.3	41.1	30.0	62.3	54.7	48.8	34.6
23-Sep	59.0	51.2	52.6	39.0	26.0	56.0	53.5	44.9	31.3
30-Sep	55.0	48.7	50.1	35.5	22.0	54.6	51.1	39.3	27.0
7-Oct	53.0	47.1	47.7	33.7	24.0	46.2	47.6	36.1	24.6
14-Oct	51.0	47.0	42.7	31.1	19.0	49.0	48.5	32.0	22.2
21-Oct	47.0	41.9	39.5	26.4	5.0	39.9	43.6	28.1	18.7
28-Oct	47.0	41.1	36.9	23.5	3.0	37.8	41.8	24.8	16.8
4-Nov	43.0	39.5	33.4	20.0	-4.0	34.3	40.2	22.7	14.6
11-Nov	44.0	41.5	30.7	17.3	-6.0	38.5	41.5	21.0	12.8
18-Nov	42.0	39.0	27.4	12.8	-10.0	30.8	37.9	18.3	10.6
25-Nov	40.0	36.1	26.0	12.2	-12.0	30.8	38.0	18.2	10.4
2-Dec	42.0	38.5	25.1	10.4	-22.0	31.5	38.3	17.7	10.2
9-Dec	38.0	35.6	21.7	7.1	-25.0	28.7	36.0	15.7	8.7
16-Dec	40.0	36.0	23.2	10.2	-19.0	28.7	36.6	16.5	10.2
23-Dec	39.0	35.7	24.7	11.8	-19.0	28.0	34.9	17.8	10.6
31-Dec	41.0	37.4	24.3	10.4	-19.0	29.4	39.8	17.5	10.0

KENAI

AK

WMO No. 702590



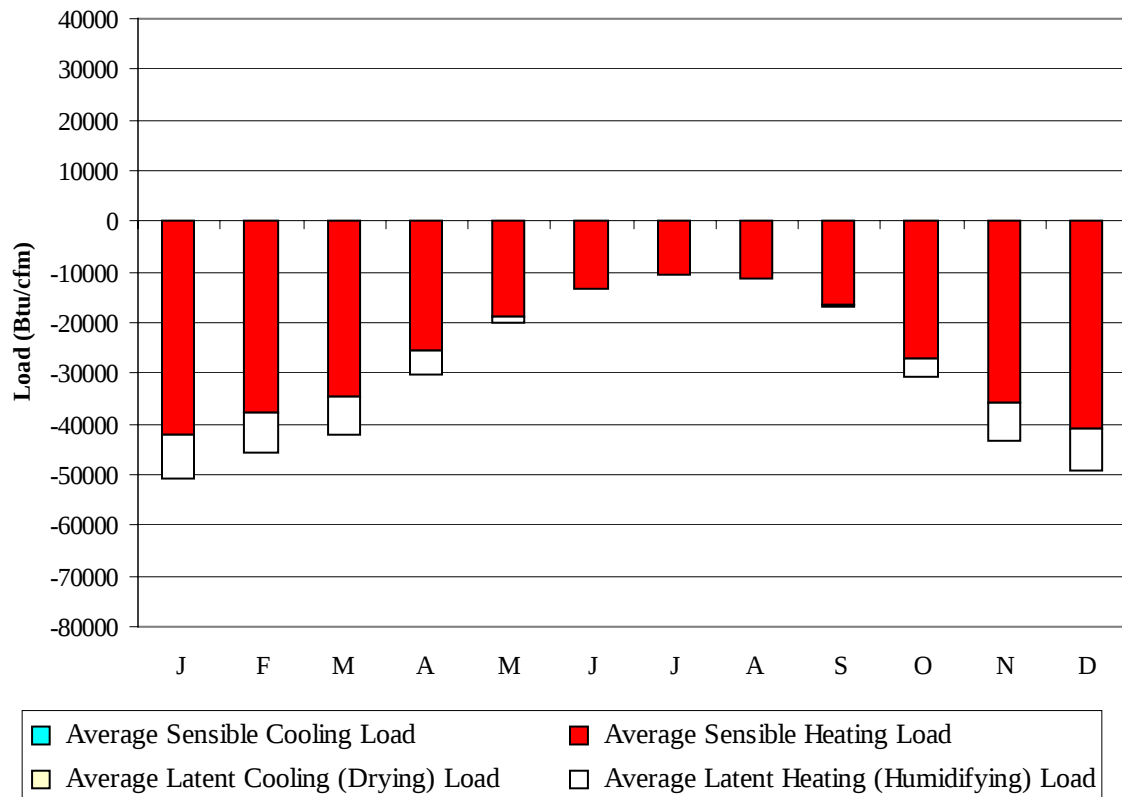
	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1537
FEB	0	1366
MAR	0	1241
APR	0	897
MAY	1	626
JUN	2	422
JUL	4	319
AUG	4	342
SEP	0	541
OCT	0	947
NOV	0	1296
DEC	0	1482
ANN	11	11016

KENAI

AK

WMO No. 702590

Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



	Average Sensible Cooling Load	Average Sensible Heating Load	Average Latent Cooling Load	Average Latent Heating Load
	(Btu/cfm)	(Btu/cfm)	(Btu/cfm)	(Btu/cfm)
JAN	0	-42244	0	-8477
FEB	0	-37591	0	-8244
MAR	0	-34591	0	-7421
APR	0	-25581	0	-4566
MAY	0	-18634	0	-1405
JUN	0	-13245	0	-125
JUL	4	-10602	0	-3
AUG	2	-11192	1	-62
SEP	0	-16351	0	-653
OCT	0	-26963	0	-3748
NOV	0	-35923	0	-7236
DEC	0	-40823	0	-8490
ANN	6	-313740	1	-50430

Average Annual Solar Radiation – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

City: ANCHORAGE
 State: AK
 WBAN No: 26451
 Lat(N): 61.17
 Long(W): 150.02
 Elev(ft): 115

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS
 Window: 1
 Overhang: 0.154
 Vert Gap: 0.2

AVERAGE INCIDENT SOLAR RADIATION (Btu/sq.ft./day), Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Global	90	300	720	1150	1440	1560	1470	1120	710	350	130	49	760
	Std Dev	10	41	65	115	129	149	134	105	70	31	15	6	25
	Minimum	70	230	550	1000	1190	1310	1160	920	580	280	110	38	710
	Maximum	110	400	830	1420	1660	1890	1700	1320	820	430	160	57	800
	Diffuse	66	190	410	600	750	850	800	630	410	230	92	39	420
Clear Day	Global	110	370	910	1640	2210	2490	2330	1790	1110	500	160	60	1150
NORTH	Global	38	110	240	370	510	600	550	390	240	130	53	22	270
	Diffuse	38	110	240	360	460	520	490	370	240	130	53	22	250
Clear Day	Global	38	100	210	370	630	840	730	430	240	120	51	25	320
EAST	Global	81	240	540	800	930	940	870	710	490	260	110	44	500
	Diffuse	49	140	310	460	550	600	560	450	300	160	69	27	310
Clear Day	Global	140	400	830	1310	1610	1740	1650	1370	950	500	190	82	900
SOUTH	Global	310	660	1040	1120	1060	1010	990	930	810	600	380	190	760
	Diffuse	110	250	420	530	580	620	590	490	360	240	140	70	370
Clear Day	Global	690	1340	1840	1910	1750	1660	1670	1770	1800	1470	840	470	1440
WEST	Global	82	250	540	790	920	980	950	740	500	270	120	44	520
	Diffuse	49	150	310	460	550	610	580	450	300	160	69	28	310
Clear Day	Global	140	400	830	1310	1610	1740	1650	1370	950	500	190	82	900

Average Annual Solar Heat and Illumination – Nearest Available Site

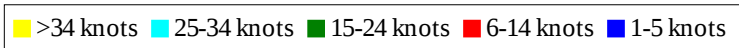
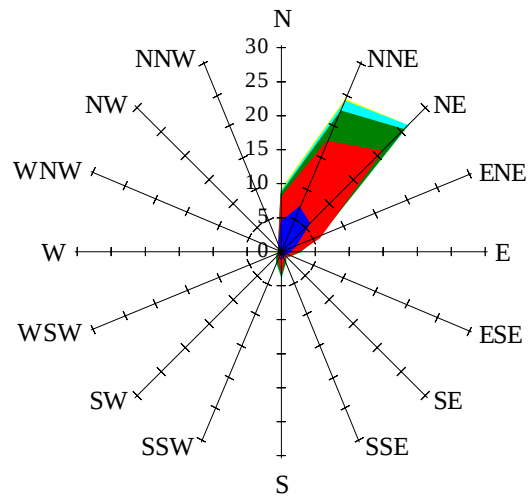
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	51	180	460	790	1020	1110	1040	780	470	220	75	28	520
NORTH	Unshaded	26	76	160	250	350	410	370	270	170	91	37	15	190
	Shaded	25	74	160	250	340	400	360	260	160	89	36	15	180
EAST	Unshaded	51	170	380	570	670	670	620	500	340	180	73	27	350
	Shaded	50	160	370	560	650	650	610	490	340	180	72	26	350
SOUTH	Unshaded	240	500	770	800	730	690	680	650	590	450	290	150	540
	Shaded	240	500	760	790	720	670	660	640	580	440	290	150	540
WEST	Unshaded	52	170	380	560	660	700	680	530	350	180	76	27	360
	Shaded	51	170	370	550	640	680	660	520	350	180	75	26	360

AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	9	31	45	42	24	34	59	76	80	68
	M.Cloudy	7	21	31	29	17	20	35	47	50	43
NORTH	M.Clear	4	9	11	10	7	15	13	15	15	14
	M.Cloudy	3	9	12	11	7	10	13	16	16	14
EAST	M.Clear	30	54	25	10	7	70	76	48	15	14
	M.Cloudy	9	23	17	11	7	24	34	28	16	14
SOUTH	M.Clear	13	57	85	79	43	9	39	67	74	55
	M.Cloudy	5	24	37	34	17	8	22	36	40	31
WEST	M.Clear	4	9	11	39	54	9	13	15	26	64
	M.Cloudy	3	9	12	21	20	8	13	16	21	35
M.Clear	(% hrs)	30	29	30	31	29	14	17	17	18	18
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	7	30	48	51	39	0	0	6	4	0
	M.Cloudy	4	16	26	28	21	0	0	5	3	0
NORTH	M.Clear	3	8	11	11	10	0	0	3	2	0
	M.Cloudy	2	7	10	11	8	0	0	2	1	0
EAST	M.Clear	27	59	41	11	10	0	0	6	2	0
	M.Cloudy	6	18	18	11	8	0	0	3	1	0
SOUTH	M.Clear	5	42	75	83	58	0	0	28	16	0
	M.Cloudy	2	14	27	30	20	0	0	7	4	0
WEST	M.Clear	3	8	11	24	56	0	0	3	8	0
	M.Cloudy	2	7	10	14	19	0	0	2	2	0
M.Clear	(% hrs)	18	18	20	20	21	27	24	24	24	26

Wind Summary - December, January, and February

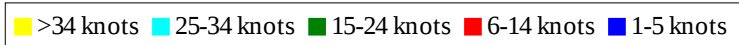
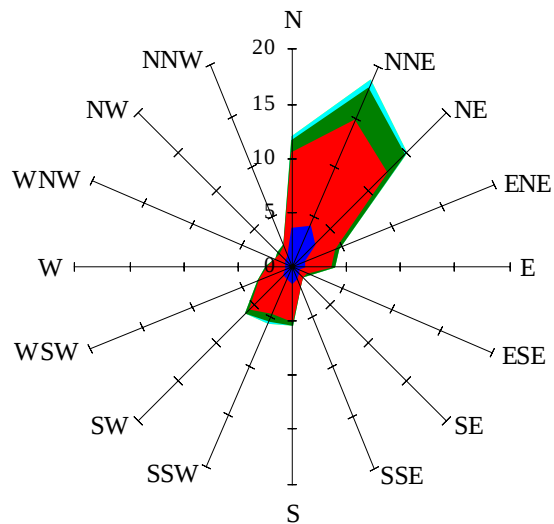
Labels of Percent Frequency on North Axis



Percent Calm = 20.73

Wind Summary - March, April, and May

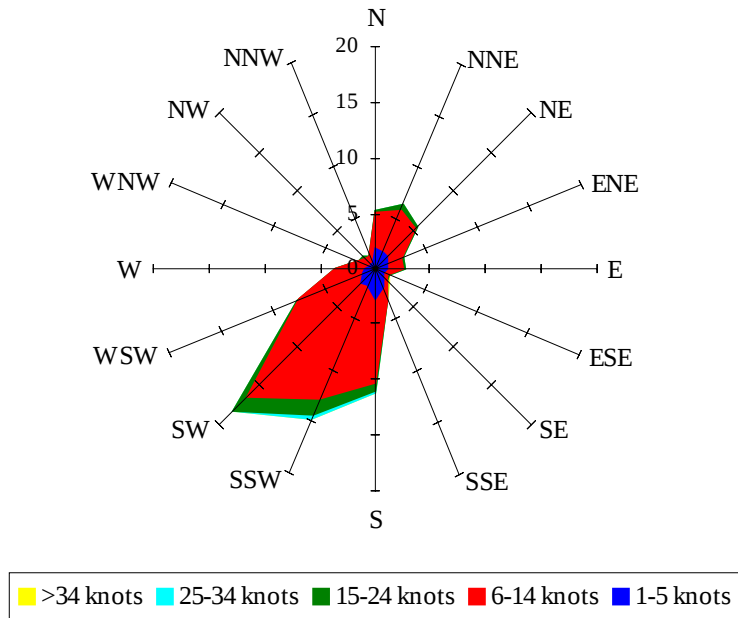
Labels of Percent Frequency on North Axis



Percent Calm = 13.57

Wind Summary - June, July, and August

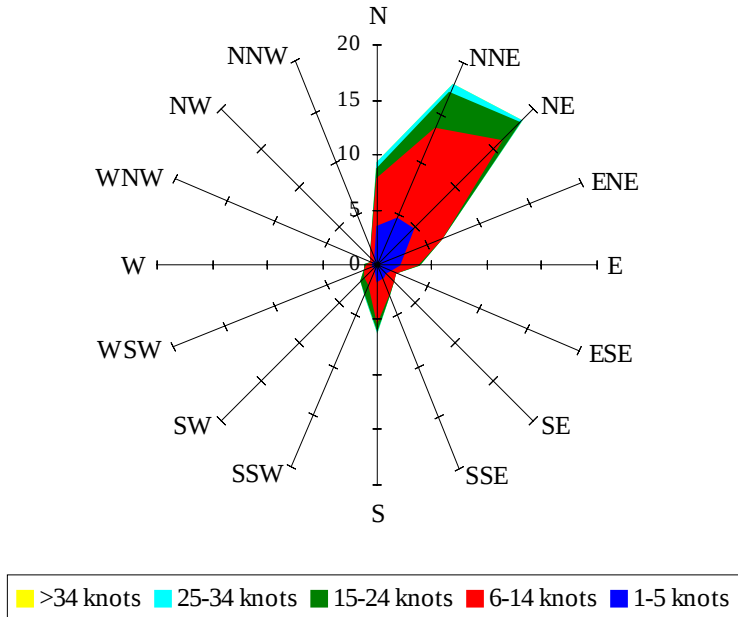
Labels of Percent Frequency on North Axis



Percent Calm = 12.08

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 21.40